

# **Biodiversity Hotspots**

## **A WebQuest for Madagascar: Island of Biodiversity**

### **Introduction**

A biodiversity hotspot is an area where many different species of plants, animals, and other organisms live and where human activity is threatening the environment. These areas have large numbers of endemic species, or species that live nowhere else in the world, and they have lost a large percentage of their original habitat. Biodiversity hotspots are found on every continent on Earth, except Antarctica. In this WebQuest, you will explore Earth's biodiversity hotspots, choose one to research, and learn about both its endemic species and the level of threat human activities pose.

### **Task**

You are a biologist working for *National Geographic* magazine. Your editor has asked you to research one of Earth's biodiversity hotspots and create a map of the area, showing where endemic species live within the hotspot. Your task includes finding photographs and information about the endemic species. You will present the map, photographs, and information to the magazine's "editorial board" (your classmates).

### **Process**

Use the resources listed in the Resources section to begin your research. The Web sites listed are good starting points, but further Internet research will be necessary. Record your answers to the following questions. You will use them to create a map and to find photographs of and information about endemic species at the end of the project.

1. How many biodiversity hotspots exist, and where are they located?
2. Choose a biodiversity hotspot and describe its ecosystems.
3. What endemic species (plants, animals, and other organisms) live in your chosen hotspot?
4. What human activities are threatening the habitat of your chosen hotspot?

### **Map and Presentation**

Once you have completed your research, use your sources to draw a map of your chosen biodiversity hotspot. On the map, indicate where species endemic to the hotspot can be found. There are probably too many endemic species in your chosen hotspot to talk about every one of them individually, but gather information about at least five of them and organize it on index cards. Print photos of the endemic species. Display your map for your classmates and, using the photos and the information on the index cards, tell them about the endemic species in the hotspot.

### **Resources**

[National Geographic](#)

[Conservation International](#)

[National Science Foundation](#)

[American Museum of Natural History](#)

**Evaluation**

Read this rubric to see how you will be scored on this activity.

Criteria					Points
	0	5	10	15	
<b>Task</b>	The task was not completed.	It appears that some effort was made to complete the task, but major ideas are missing.	The task was completed but some information was incorrect.	The task was completed with correct information and high level of detail.	
<b>Process</b>	The process was not followed.	The process was followed, but not all of the questions were answered.	The process was followed but some answers were incorrect.	The process was followed, all answers were complete and correct.	
<b>Map and Presentation</b>	The map was poorly done and did not accurately reflect the location of endemic species. Little information about or photos of endemic species was presented.	The map was adequate, but the information given about the endemic species was not always accurate, and too few species were profiled.	The map was well done and accurately showed the location of endemic species. The correct number of species was profiled, but some information was inaccurate.	The map was accurate and done in a creative style. The required number of species were profiled, and a large amount of accurate information about them was given.	
<b>Total Score</b>					